

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Bag Makers, Inc.
Attn: Don Brown
6606 South Union Road
Union, Illinois 60180

Application No.: 08020004

I.D. No.: 111804AAD

Applicant's Designation:

Date Received: February 4, 2008

Subject: Six Flexographic and Four Silk Screen Presses

Date Issued:

Location: 6606 South Union Road, Union, McHenry County

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission unit(s) and/or air pollution control equipment consisting of one flexographic printing press (FP21) and fourteen silk screen printing presses (SP16 - SP29) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit is issued based on construction of one flexographic and fourteen silk screen printing presses not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically the Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 Ill. Adm. Code Part 203. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the volatile organic material (VOM) emissions from the above-listed equipment below the levels that would trigger the applicability of these rules.
- b. This permit is based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements of Section 112(g) of the Clean Air Act.
- c. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- 2a. Pursuant to 35 Ill. Adm. Code 218.204(c), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test

methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

	kg/l	lb/gal
Paper Coating	0.28	(2.3)

Note: The paper coating limitation shall not apply to any owner or operator of any paper coating line on which flexographic or rotogravure printing is performed if the paper coating line complies with the emissions limitations in 35 Ill. Adm. Code 218.401. In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code 218 Subpart TT.

- b. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
3. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subpart KK. The flexographic printing presses operated at the facility are not wide-web flexographic printing presses, as defined in 40 CFR 63.822(a).
- 4a. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- b. This permit is issued based upon the source not being subject to the requirements of 35 Ill. Adm. Code 218.401, Flexographic and Rotogravure Printing. This is a consequence of the federally enforceable production and operating limitations of this permit, which restrict the maximum theoretical emissions of VOM from this facility to less than 100 tons per year and the potential to emit for VOM emissions to less than 25 tons per year.
- c. This permit is issued based upon the silk screen printing presses are not required to meet the control requirements of 35 Ill. Adm. Code 218.986 pursuant to 35 Ill. Adm. Code 218.980(d): No limits under 35 Ill. Adm. Code 218 Subpart TT shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with 35 Ill. Adm. Code 219.986 does not exceed 4.5 Mg (5.0 tons) per calendar year.
5. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 6a. Emissions and operating of the flexographic printing presses and the

silk screen printing presses shall not exceed the following limits:

- i. VOM emissions from fifteen flexographic printing presses (FP1 - FP15) and ten silk screen printing presses (SP1 - SP10) constructed before June 15, 2005 shall not exceed 245 lb/day and 24.5 tons/year.
- ii. VOM emissions from twenty-one flexographic printing presses (including a new press FP21) shall not exceed 245 lb/day and 24.5 tons/year.
- iii. The above limitations contain revisions to previously issued Federally Enforceable State Operating Permit (FESOP) 03070014. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit. The source has requested these revisions and has addressed the applicability and compliance of Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the above-listed construction permit application contains the most current and accurate information for the source. Specifically, the emission limits for VOM from the source have been separated by the applicable rules and timing of when the units were constructed.
- iv. Compliance with the annual limits of Condition 6(a) shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 day total).
- b. VOM emissions from twenty-nine silk screen printing presses shall not exceed 0.15 ton/mo and 1.16 tons/year (including 0.56 tons/yr from fourteen new presses, SP16 - SP29).
- c. Total VOM emissions from the source (all twenty-one flexographic and all twenty-nine silk screen printing presses) shall not exceed 2.57 tons/month and 25.66 tons/year.
- d. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements of Section 112(g) of the Clean Air Act.
- e. VOM and HAP emissions shall be determined from the following equation:

$$E = [\sum(M_i \times C_i) - W \times C_w]/2,000$$

Where:

E = VOM or HAP emissions (tons);

M_i = VOM or HAP-containing raw material usage (gal/day, gal/mo, and gal/yr);

C_i = VOM or HAP content of the raw material (lb/gal);

W = certified amount of waste shipped-off (lb/day, lb/mo, and lb/yr);
and

C_w = certified VOM or HAP content of the waste (% by weight).

- f. Compliance with the annual limits of Conditions 6(b) through 6(e) shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month of total).
- 7a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 8 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 8a. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
- b. Pursuant to 35 Ill. Adm. Code 218.404(a), the VOM content of each coating and ink and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required

under 35 Ill. Adm. Code 218.404.

- 9a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 of and complying by means of 35 Ill. Adm. Code 218.204 shall collect and record following information each day for each coating line and maintain the information at the source for a period of three years:
- i. The name and identification number of each coating as applied on the coating lines.
 - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on the coating lines.
- b. Pursuant to 35 Ill. Adm. Code 218.404(b)(2), the owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
- i. The name and identification number of each coating and ink as applied on each printing line.
 - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line.
- 10a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Amount of each material, which contains either VOM or HAP, used on printing presses FP1 - FP15 and silk screen printing presses SP1 - SP10, which were constructed prior to June 15, 2005, (gal/day, and gal/yr);
 - ii. Amount of each material, which contains either VOM or HAP, used on all flexographic printing presses FP1 - FP21 (gal/day, gal/mo, and gal/yr);
 - iii. Amount of each material, which contains either VOM or HAP, used on all silk screen printing presses SP1 - SP29 (gal/mo, and gal/yr);
 - iv. VOM and HAP content of each material containing VOM or HAP (lb/gal);
 - v. Certified amount of waste shipped-off (lbs/mo and lbs/yr) and its VOM content (% by weight);
 - vi. Daily and annual VOM emissions for printing presses FP1 - FP15 and silk screen printing presses SP1 - SP10 (which were constructed prior to June 15, 2005) with supporting calculations (lb/day and ton/yr);
 - vii. Daily and annual VOM emissions for flexographic printing presses FP1 - FP21 with supporting calculations (lb/day and ton/yr);

- viii. Monthly and annual VOM emissions for screen printing presses SP1 - SP29 with supporting calculations (ton/month and tons/year); and
 - ix. Monthly and annual VOM and HAP emissions from the source with supporting calculations (ton/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
11. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance and Enforcement Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.
- 12a. Pursuant to 35 Ill. Adm. Code 218.211(c) (3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:
- i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
 - ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) (1) or (e) (1), respectively. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), respectively.
- b. Pursuant to 35 Ill. Adm. Code 218.404(b) (3), any owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
- c. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit records to the Illinois EPA within 30

calendar days from the date of the request that document that the emission unit is exempt from those requirements.

13. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance and Enforcement Section (#40)
P.O. Box 19276
Springfield, IL 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

ECB:VJB:

cc: Region 1